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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,928	10/16/2001	Darren Duane Cofer	1100.1152101 (H0002064)	6322
128	7590	01/10/2006	EXAMINER KASSA, YOSEF	
HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			ART UNIT 2623	PAPER NUMBER

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,928

Applicant(s)

COFER ET AL.

Examiner

YOSEF KASSA

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22, 24-31, 34-36, 42 and 43 is/are rejected.
- 7) ☒ Claim(s) 23, 32, 33 and 37-41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments, (page 9-17) filed on October 17, 2005, with respect to claims 1-41 under Diaz (U.S. Patent 5,992,094), and Conrad et al (U.S. Patent 5,465,115) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made on claims 1-43 on Conrad et al (U.S. Patent 5,465,115), and further in view of Sengupta et al (U.S. Patent 6,359,647).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22, 24-31, 34-36, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conrad et al (U.S. Patent 5,465,115), and further in view of Sengupta et al (U.S. Patent 6,359,647).

With regarding to claim 1, Conrad discloses monitoring at least a portion of the border, i.e., entrance or exit, region of the area of interest for breach by an object (see col. 4, lines 31-38, note that the process of determining if the people are entering or exiting the traffic zone broadly reads on above limitation).

Conrad did not explicitly call for monitoring at least a portion of the interior region of the area of interest for the object after the object breaches the border. However, at the same field of endeavor, Sengupta teaches this feature (see col. 2, lines 4-15). At the time of invention was made it would have been obvious to an ordinary skill in the art to incorporate the teaching of Sengupta figure tracking system into Conrad system. The suggestion/motivation doing so would have been to provide identification of the figure within the image by figure tracking system in the field of view. Therefore, it would have been obvious to combine Sengupta with Conrad to obtain the invention as specified in claim 1.

With regarding to claim 2, Conrad discloses ceasing monitor the interior region of the area of interest after the object leaves the area of interest (note that the camera 10 is turned on when there is no people in the traffic zone); and continuing to monitor at least a portion of the border region of the area of interest after the object leaves the area of interest (refer to col. 4, lines 33-38, entrance or exit is monitored when there is no people around).

With regarding to claim 3, Conrad discloses wherein the interior region of the area of interest is not monitored until the object no longer breaches the border region of the area of interest (see col. 4, lines 35-38, that is, counting performed only when the people are in traffic zone).

With regarding to claim 4, Conrad discloses continuing to monitor at least a portion of the border region to the area of interest while the interior region is being monitored (see col. 4, lines 30-38).

With regarding to claim 5, Conrad discloses further comprising the step of providing a safety output when the border region is breached by the object (see col. 4, lines 35-38, entrance or exit).

With regarding to claim 6, Conrad is silent about the safety output disables a piece of equipment located in the area of interest. However, at the same field of endeavor, Diaz teaches this feature (see col. 10, lines 41-56). At the time of invention was made it would have been obvious to an ordinary skill in the art to incorporate the teaching of Diaz image object monitoring system into Conrad system.

With regarding to claim 7, Conrad is silent about the safety output sounds an alarm. However, at the same field of endeavor, Diaz teaches this feature (see col. 18, lines 8-20). At the time of invention was made it would have been obvious to an ordinary skill in the art to incorporate the teaching of Diaz image object monitoring system into Conrad system.

With regarding to claim 8, Conrad discloses wherein the border region comprises a continuous region (see Fig. 1, item 8).

With regarding to claim 9, Conrad discloses wherein the border region comprises an interrupted region (see Fig. 1, item 8).

With regarding to claim 10, Conrad discloses wherein the area of interest excludes a defined region from its interior (see Fig. 1, item 8).

Claim 11 similarly analyzed and rejected the same as claims 1.

With regarding to claim 12, Conrad discloses wherein the one or more border region include a reference marking (see Fig. 1, item 8).

Claims 13, 15 and 16 are similarly analyzed and rejected the same as claim 12.

With regarding to claim 14, Conrad discloses wherein the step of analyzing the one or more border regions of the captured image comprises the step of comparing the one or more border regions of the capture image to one or more corresponding regions of a reference image (see col. 4, lines 40-44).

With regarding to claim 17, Conrad discloses wherein the predetermined pattern determines a minimum size of the objects to be detected (see col. 4, lines 35-39, broadly reads on counting the people when the enter or exit).

With regarding to claim 18, Conrad discloses further comprising the step of storing the capture image when an object has entered the area of interest (see col. 4, lines 40-44).

Claim 19 similarly analyzed and rejected the same as claims 18.

With regarding to claim 21, Conrad discloses wherein the reference image is taken at a set time interval (see col. 4, lines 40-44).

With regarding to claim 20, Conrad discloses wherein the reference image is taken in response to a change in one or more conditions in the area of interest (see col. 4, lines 12-20).

Claim 22 is similarly analyzed and rejected the same as claim 14.

Claims 24, 26 and 11 are similarly analyzed and rejected the same as claim 1.

With regarding to claim 25, Conrad discloses wherein the image capturing devices are video cameras (see col. 4, lines 12-16).

Claim 26 and 29 are similarly analyzed and rejected the same as claim 25.

Claims 27, 28, 30, 31 and 36 are similarly analyzed and rejected the same as claims 1-9.

With regarding to claim 34, Conrad discloses wherein the interior region is defined to include the border region (see Fig. 1, item 8).

With regarding to claim 35, Conrad discloses wherein the interior region is defined to exclude the border region (see Fig. 1, item 8).

With regarding to claim 42, Conrad discloses wherein the step of monitoring at least a portion of the border region optically monitors at least a portion of the border region of the area of interest for breach by an object (see col. 14, lines 11-18).

With regarding to claim 43, Conrad discloses wherein the monitoring means optically monitors at least a portion of the border region of the area of interest for breach by an object (see col. 4, lines 33-39).

Allowable Subject Matter

3. Claims 23, 32, 33 and 37-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other Prior Art Cited

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (6665004), (6002995), (5729471) and (5574498).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (571) 272-7452. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JINGGE WU can be reached on (571) 272-7429. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communication and (571) 273-8300 for after Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

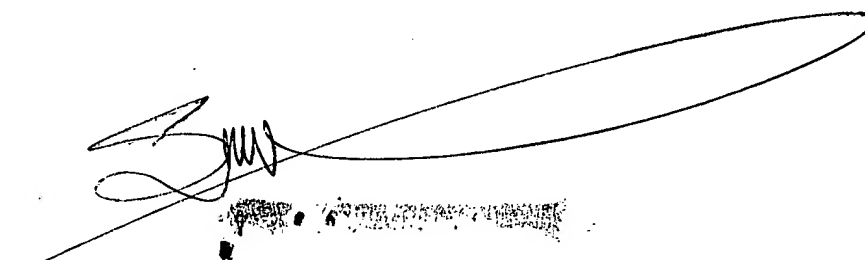
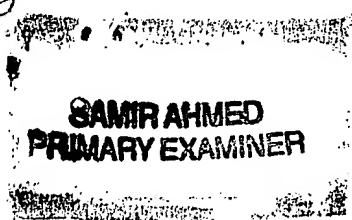
Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PATENT EXAMINER

Yosef Kassa



01/04/06.

SAMIR AHMED
PRIMARY EXAMINER